### WELDON TIMBER SALE #30-078700 SECTION 28 OF T4N R11E ROAD PLAN SUMMARY

Total:	R-8210	R-8200	R-8000
	0	0	0
56.75	4.50	2.75	STA's Pre-haul Maint.
49.50	I		STA's Ditched 49.50
0.00	I		STA's Brushing
7.25	4.50	2.75	STA's Outslope
3	I	l	Culvert Cleaning 3
2	2		Roll <u>Dips</u>
56.75	4.50	2.75	STA's Final Maint.

April 28, 2006 Page 1 of 1 Agreement Number #30-078700

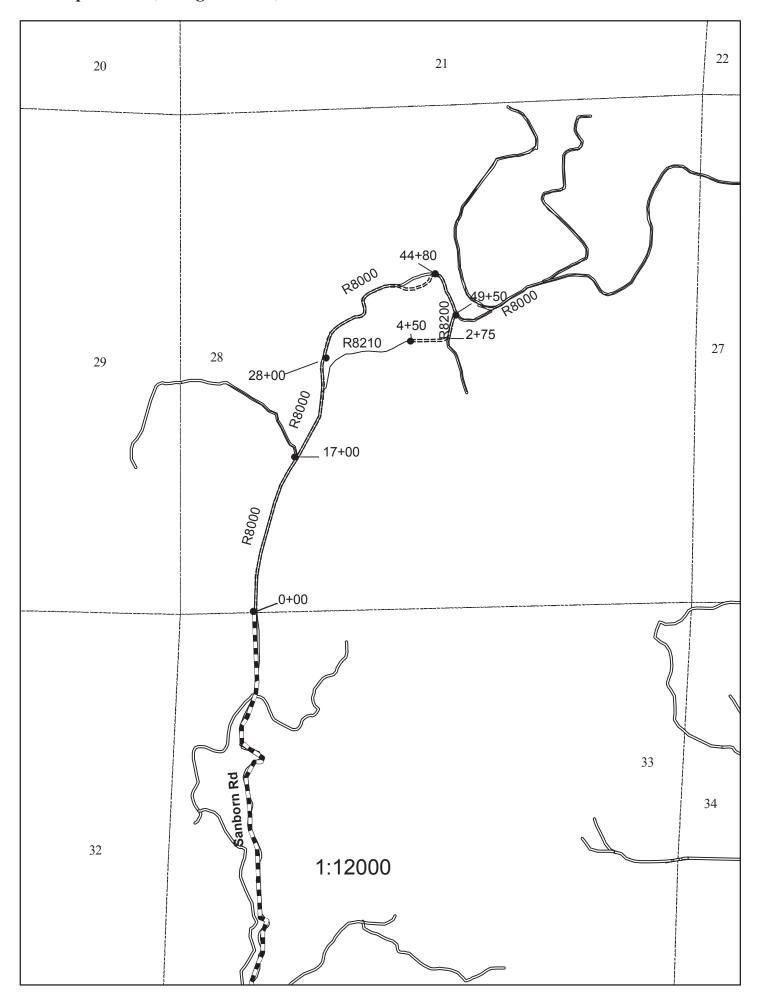
Sale Name: Weldon

Trust: State Forest Board Transfer (01)

Region: Southeast

County: Klickitat

### Township 4 North, Range 11 East, W.M.





### STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES DOUG SUTHERLAND, COMMISSIONER OF PUBLIC LANDS

### WELDON TIMBER SALE ROAD PLAN SECTION 28, TOWNSHIP 4 NORTH, RANGE 11 EAST, W.M. COUNTY: KLICKITAT

AGREEMENT NO.: 30-078700 DATE: MAY 10, 2006

### SECTION 0 - SCOPE OF PROJECT

This project includes, but is not limited to pre-haul maintenance including:

cleaning ditches;

cleaning culvert inlets and outlets;

removing berms from shoulders;

installation of rolling dips;

grading and shaping existing road surface and turnouts.

### **SECTION 1: GENERAL CLAUSES**

### SECTION 1.1: GENERAL: GENERAL CLAUSES

1.1-1

Clauses in this plan apply to all pre-haul maintenance including landings unless otherwise noted.

1.1-2

Pre-haul maintenance of the following road is required. All roads shall be pre-haul maintained on the State's location and in accordance with this Road Plan.

Road	<u>Station</u>	<u>Type</u>
R-8000	0+00 to 49+50	Pre Haul Maintenance
R-8200	0+00 to 2+75	Pre Haul Maintenance
R-8210	0+00 to 4+50	Pre Haul Maintenance

1.1-4

If the purchaser desires a road location or design change, a revised road plan shall be submitted to the State for consideration.

### SECTION 1.2 - GENERAL: CONSTRUCTION CONSTRAINTS

1.2-1

The pre-haul maintenance of any road specified herein shall not be permitted between October 31 and May 1 unless authority to do so is granted, in writing, by the Contract Administrator.

<u>Road</u>	Station
R-8000	0+00 to 49+50
R-8200	0+00 to 2+75
R-8210	0+00 to 4+50

SECTION 1.2.1 - GENERAL: CONSTRUCTION CONSTRAINTS:

### CONSTRUCTION SEQUENCE

### 1.2.1-1

Grading, ditch cleaning, and rolling dips installation shall be completed prior to haul and are subject to written approval by the Contract Administrator.

### SECTION 1.3 - GENERAL: HAULING CONSTRAINTS

### 1.3-2

On the following roads, timber haul shall not be permitted between the dates listed unless authorized, in writing, by the Contract Administrator.

<u>Road</u>	<u>Closure Period</u>
R-8000	November 1 through April 30
R-8200	November 1 through April 30
R-8210	November 1 through April 30

### SECTION 1.5 - GENERAL: ROAD MAINTENANCE

### 1.5-1

Maintenance on the following roads shall be performed in accordance with Forest Access Road Maintenance Specifications.

<u>Road</u>	<u>Stations</u>
R-8000	0+00 to 49+50
R-8200	0+00 to 2+75
R-8210	0+00 to 4+50

### 1.5-3

On the following roads, snowplowing shall not be permitted unless authorized, in writing, by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
R-8000	0+00 to 49+50
R-8200	0+00 to 2+75
R-8210	0+00 to 4+50

### SECTION 6 - DRAINAGE

### SECTION 6.1 - DRAINAGE: SURFACE DRAINAGE

### 6.1-1

On the following roads, surfaces shall be shaped to augment the escape of surface runoff.

<u>Road</u>	<u>Stations</u>	Shape of Road Surface
R-8000	0+00 to 49+50	Crown 4 inches @ centerline
R-8200	0+00 to 2+75	Outslope 4 inches in 10 feet
R-8210	0+00 to 4+50	Outslope 4 inches in 10 feet

### 6.1-2

Berms shall be removed from road shoulders to permit escape of runoff.

Weldon Timber Sale Contract # 30-078700

### **SECTION 6.3 - DRAINAGE: DITCHES**

6.3-5

On the following roads, cleaning ditches, culvert headwalls, catch basins, culvert inlets, and culvert outlets shall be completed prior to timber haul and shall be done in accordance with the Typical Section Sheet and Culvert and Drainage Specification Details.

 Road
 Stations

 R-8000
 0+00 to 49+50

### SECTION 6.7: DRAINAGE: ROLLING DIPS

6.7-1

On the following roads rolling dips shall be constructed in accordance with the Rolling Dip Detail sheet at locations as specified on the Rolling Dip List. **ROLLING DIPS**SHALL BE INSTALLED AT THE TIME OF CONSTRUCTION AND SHALL BE CONTINUOUSLY MAINTAINED IN AN OPERABLE CONDITION. Rolling dips shall be installed with a crawler tractor. Use of other equipment shall not be permitted without prior written approval of the Contract Administrator.

<u>Road</u>	<u>Stations</u>
R-8210	0+60
R-8210	2+50

### SECTION 9 – POST HAUL ROAD WORK

### SECTION 9.1 - POST HAUL ROAD WORK: ROAD AND LANDING FINAL MAINTENANCE

9.1-1

At termination of haul, final maintenance shall be performed on the following roads.

Road	<u>Stations</u>	<u>Type</u>
R-8000	0+00 to 49+50	Light
R-8200	0+00 to 2+75	Light
R-8210	0+00 to 4+50	Light

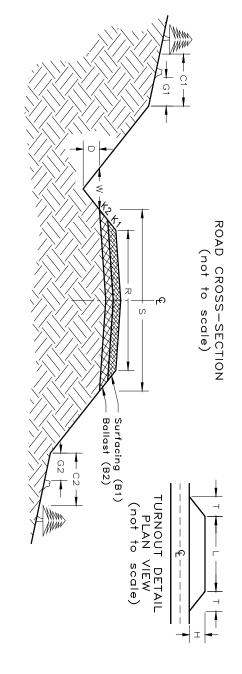
### 9.1-1A

Light final maintenance shall consist of:

- -blading the road and landings with a motor grader;
- -removing berms;
- -reshaping rolling dips and/or water bars to specification;
- -pulling ditches and cleaning culvert inlets and outlets.

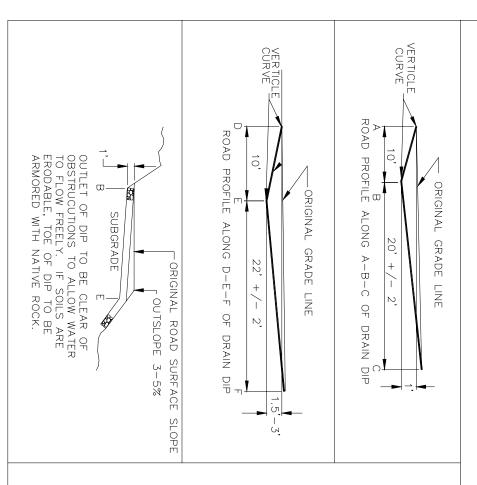
The finished road surfaces shall drain freely and shall be smooth, firm and free of chuckholes.

## TYPICAL SECTION SHEET

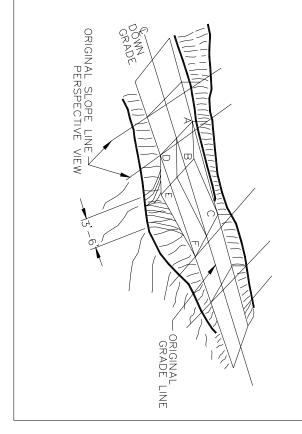


R-8210	R-8200	R-8000			ROAD
PRE-HAUL	PRE-HAUL	PRE-HAUL	PRE-HAUL	RECONSTRUCTION/	CONSTRUCTION/
0+00	0+00	0+00		STATION	FROM
4+50	2+75	49+50		STATION	TO
N/A	N/A	N/A		CLASS	TOLERANCE
12'	12'	12'	S	WIDTH	SUBGRADE
N/A	N/A	4	CENTERLINE	INCHES @	CROWN
4	4	N/A	10 FEET	INCHES IN	OUTSLOPE
N/A	N/A	N/A			ROAD
		2'	W	WIDTH DEPTH	DITCH
		1,	D	DEPTH	CH
N/A	N/A	N/A	G1 G2	LIMITS	GRUBBING
N/A	N/A	N/A	C1 C2	LIMITS	CLEARIING
N/A	N/A	N/A	Т	TAPER	
N/A	N/A	N/A	L	TAPER LENGTH WIDTH	TURNOUT
N/A	N/A	N/A	W	WIDTH	
					COMMENTS

# COLLING DIP DETAIL



NOTE: PLAN OF DIP SHOWN IS FOR OUTSLOPED
ROLLING DIP, DIPS MAY BE EITHER INSLOPED
OR OUTSLOPED. WHEN INSLOPED, DIPS SHALL
DRAIN FREELY INTO DITCHES OR CULVERT INLETS.
WHEN OUTLSLOPED, THEY SHALL DRAIN FREELY
ONTO NATURAL GROUND. WHERE SOILS ARE ERODABLE,
OUTLET SHALL BE ARMORED WITH NATIVE ROCK.
THE MINIMUM CROSS GRAPE FROM "B" TO "E"
IS 4% GREATER THAN THE ROAD SURFACE SLOPE.
SKEW LINE B-E TO FIT LOW POINT IN DRAW, IF
LOCATED IN NATURAL DRAIN.



### FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

### A. Cuts and Fills

- 1. Maintain slope lines as constructed. Remove slides from the ditches and roadway. Replace fills to 1 1/2:1 slopes with selected material or as directed. Remove overhanging material from the cut slopes.
- 2. Material from slides or other sources requiring removal shall not be deposited in streams or at locations where it will erode into streams or water courses.
- 3. Undesirable slide materials and debris shall not be mixed into the surface material.

### B. Surface

- 1. Grade and shape the road surface, turnouts, and shoulders to the original crown, inslope or outslope as directed to provide suitable traveled surface and surface water runoff in an even, unconcentrated manner.
- 2. Blading must not undercut the backslope at the bottom of the ditchline or cut into geotextile fabric on the road.
- 3. If required in writing by the SE Region Engineer, water shall be applied as necessary to abate dust.
- 4. Desirable surface material shall not be bladed off the roadway.
- 5. Replace surface material lost or worn away.
- 6. Remove berms except as directed by the State.
- 7. Barrel spread soft spots to prevent degradation of geotextile.

### C. Drainage

- 1. Keep ditches and drainage channels at outlets and inlets of culverts clear of obstructions and functioning as intended.
- 2. Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This must be done even during periods of inactivity.
- 3. Add stable material at the outlet end of the cross drain culvert as needed to stabilize the soil.
- 4. Headwalls: maintain to the road shoulder level with material that will resist erosion.
- 4. Prevent sediment bearing surface runoff from entering live streams.

### D. Structures

Repair bridges, culverts, cattle guards, fences, and other road structures to the condition required by the construction specifications.

### E. End of Season

Do maintenance work to minimize damage from the elements such as blading to insure correct runoff, ditch, and culvert cleaning and water bars.

### F. Debris

Remove fallen timber, limbs, and stumps from the slopes or roadway.